

REMARKS/ARGUMENTS

Claims 1-19 are pending in the application. Claims 1, 7, and 14 were amended.

Claims 1, 5, 7, 14, and 18 were rejected under 35 U.S.C. §102(e) as being anticipated by Swoboda et al., U.S. Patent No. 6,643,803 (hereinafter “Swoboda”). Claims 2, 8, and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Swoboda in view of Sato, U.S. Patent No. 5,903,768 (hereinafter “Sato”). Claims 3-4, 6, 9-11, 16-17, and 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Swoboda in view of Mandyam et al., U.S. Patent No. 6,285,974 (hereinafter “Mandyam”). Claims 12-13 were rejected under 35 U.S.C. §103(a) as being unpatentable over Swoboda in view of Mandyam in further view of Hennessy and Patterson, Computer Organization and Design, 2nd Edition, 1998 (hereinafter “Hennessy”).

Claim Rejections Under 35 U.S.C. §102(e)

Claims 1, 5, 7, 14, and 18 were rejected under 35 U.S.C. §102(e) as being anticipated by Swoboda. Swoboda generally discloses emulation and debug circuitry that can be incorporated into a variety of digital systems (*See Abstract*).

Swoboda does not disclose generating a neutral instruction that causes an architectural state value for said processor to be ascertained, as recited by claims 1, 7, and 14 as amended.

The Office Action cites Claim 4 of Swoboda, which states:

The digital system of claim 1, further comprising additional jamming circuitry connected to the instruction pipeline and connected to be responsive to the test port circuitry, and wherein the additional jamming circuitry is operable to jam a null instruction into the instruction pipeline while the processor is executing the sequence of instructions such that a bubble is formed in the instruction pipeline; such that a system resource can be accessed in response to the access command received by the test port circuitry by using the bubble created by the null instruction and detected by the detection circuitry while the instruction pipeline continues execution of the sequence of instructions.

(See Swoboda, Claim 4).

In other words, the null instruction jammed into the circuitry causes a bubble that allows a reading of the processor to take place. The actual read is caused by the external test port circuitry. Therefore, Swoboda does not disclose generating a neutral instruction that causes an architectural state value for said processor to be ascertained. Applicants respectfully submit, therefore, that elements of claim 1, 7, and 14 are neither shown nor suggested by the cited reference. Claims 5 and 18 depend from claims 1 and 14, respectively. Accordingly reconsideration and withdrawal of the rejection of claims 1, 5, 7, 14, and 18 under 35 U.S.C. §102(e) is respectfully requested.

Claim Rejections Under 35 U.S.C. §103(a)

Claims 2, 8, and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Swoboda in view of Sato. Sato discloses a pipelined microprocessor capable of avoiding pipeline stalls (*See Abstract*). One of the disclosed methods is by inserting a NOP operation into the pipeline (*See Sota, Col. 2, Lines 4-14*).

Neither Swoboda, Sato, nor any combination thereof discloses generating a neutral instruction that causes an architectural state value for said processor to be ascertained, as recited by claims 1, 7, and 14.

Applicants respectfully submit, therefore, that elements of claims 1, 7, and 14 are neither shown nor suggested by the cited references. Claims 2, 8, and 15 depend from claims 1, 7, and 14, respectively. Accordingly reconsideration and withdrawal of the rejection of claims 2, 8, and 15 under 35 U.S.C. §103(a) is respectfully requested.

Claims 3-4, 6, 9-11, 16-17, and 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Swoboda in view of Mandyam. Mandyam discloses detecting architectural violations in a multiprocessor computer system using a random test generator.

Neither Swoboda, Mandyam, nor any combination thereof discloses generating a neutral instruction that causes an architectural state value for said processor to be ascertained, as recited by claims 1, 7, and 14.

Applicants respectfully submit, therefore, that elements of claims 1, 7, and 14 are neither shown nor suggested by the cited references. Claims 3-4, 6, 9-11, 16-17, and 19 depend from claims 1, 7, and 14, respectively. Accordingly reconsideration and withdrawal of the rejection of claims 3-4, 6, 9-11, 16-17, and 19 under 35 U.S.C. §103(a) is respectfully requested.

Claims 12-13 were rejected under 35 U.S.C. §103(a) as being unpatentable over Swoboda in view of Mandyam in further view of Hennessy. Hennessy is a computer textbook that discloses AND and OR operations.

Neither Swoboda, Mandyam, Hennessy, nor any combination thereof discloses generating a neutral instruction that causes an architectural state value for said processor to be ascertained, as recited by claim 7.

Applicants respectfully submit, therefore, that elements of claim 7 are neither shown nor suggested by the cited references. Claims 12-13 depend from claim 7. Accordingly reconsideration and withdrawal of the rejection of claims 12-13 under 35 U.S.C. §103(a) is respectfully requested.

For all the above reasons, the Applicant respectfully submits that this application is in condition for allowance. A Notice of Allowance is earnestly solicited.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayments under 37 C.F.R. §1.16 or §1.17 to Deposit Account No. 11-0600.

The Examiner is invited to contact the undersigned at (408) 975-7500 to discuss any matter concerning this application.

Respectfully submitted,

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